

**Remarks**

Claims 6, 8-10, 13, 16-23 and 29 have been cancelled. Claims 1-5, 11-12 and 14-15 are currently pending. No new matter has been added.

**Claim Rejections Withdrawn**

Applicants thank the Examiner for the indication that the rejections of claim 1 under 35 U.S.C. §112, second paragraph have been withdrawn.

**Rejection under 35 U.S.C. §112, first paragraph**

The Examiner has maintained the rejection of claims 6 and 8-10 under 35 U.S.C. §112, first paragraph as lacking written description. Applicants have cancelled claims 6 and 8-10. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection.

**Rejection under 35 U.S.C. §112, first paragraph**

The Examiner has maintained the rejection of claims 6 and 8-10 under 35 U.S.C. §112, first paragraph as lacking enablement. Applicants have cancelled claims 6 and 8-10. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection.

**Rejection under 35 U.S.C. §102(a)**

The Examiner has maintained the rejection of claims 1-3 and 8-9 under 35 U.S.C. §102(a) in view of Sulston et al. (Genome Research, 8(11):1097-1108, 1998). Applicants traverse the rejection on two grounds. First, the declaration of Dr. Nicholas H. Heintz dated February 6, 2002 previously submitted to the USPTO on April 9, 2002 and received on April 18, 2002 satisfies applicants burden. Secondly, even if the declaration were not sufficient to overcome the rejection, Applicants have provided evidence that the Sulston et al reference is not anticipatory prior art to the instant claims because it did not include the claimed sequence.

**1. Declaration**

Applicants previously submitted (in the response to Office Action mailed April 9, 2001) a Declaration under U.S.C. § 1.131 from Nicholas H. Heintz, a co-inventor of the instant application. This Declaration sets forth proof that Applicants had conception and reduction to practice of the subject matter of the rejected claims prior to the publication date of the Sulston GenBank submission in September 1998. Attached to the Declaration (submitted to the USPTO 607594.1

in the Response to Office Action filed on April 9, 2002 and received by the USPTO on April 18, 2002) as Exhibit 1, was the RIP60 nucleic acid sequence possessed by the inventor prior to September 1998; as Exhibit 2, was the RIP60 nucleic acid sequence as filed in the present invention; and as Exhibit 3, was a comparison of the sequences of Exhibits 1 and 2. More details relating to the experimental design and results leading to the discovery of the RIP60 sequence have been previously provided to the Examiner in various forms including in the Examples section of the specification, in the Dissertation of co-inventor Christopher R. Houchens (submitted as an appendix to the Provisional Patent Application to which priority is claimed), and in the Nucleic Acids Research reference co-authored by the co-inventors that was previously cited in an Information Disclosure Statement.

The Examiner has objected to the Declaration because there were no original exhibits provided therewith. The Examiner cited the M.P.E.P. section describing 37 C.F.R. section 1.131 Affidavit or Declaration in support of this statement. The following sentence from the M.P.E.P. was highlighted in the Office Action (Paper No. 20): "Original exhibits of drawings or records, or photocopies thereof, must accompany and form part of the affidavit or declaration or their absence satisfactorily explained."

Attempts to photocopy the original data, sequencing films, was unsuccessful because the films are too dark to be photocopied. The original data is the property of the University of Vermont and must be maintained in the laboratory. It is not possible to submit the original data to the Patent Office. Thus, original data or photocopies thereof cannot be submitted to the Patent Office. Dr. Heintz has described under oath the experiments performed and the data generated. A satisfactory explanation for the lack of original data or photocopy is provided herein. Applicants have met the burden of 37 C.F.R. section 1.131.

## 2. Sulston et al is not anticipatory prior art

The Sulston et al. reference was published in November 1998. It provides no explicit sequence information. It does, however, refer to sequence data posted at the Sanger website. The Examiner has not provided the sequence that was made available by Sulston et al. as of November 1998 on the Sanger website. The Examiner has provided a GenBank listing for the sequence having Accession Number AC005586 submitted by Sulston et al. which is reported to be the complete sequence of the Homo Sapiens PAC clone RP4-584D14 from chromosome region 7q31-q35, having a length of 132150 nucleotides. The GenBank listing (the front page of which was attached as Appendix B to the Response to Office Action filed on April 9, 2002 and 607594.1

received on April 18, 2002) indicates that the sequence, in the form presented and relied upon by the Examiner, was made publicly available by GenBank on September 30, 2000. Accordingly, the nucleotide sequence cited and relied upon by the Examiner is not anticipatory prior art because it was made publicly available (in the form cited by the Examiner) until only after the priority date of the present application (i.e., January 1999).

Applicants found and provided the revision history for Accession Number AC005586, and sequence data submitted to GenBank by Sulston et al. prior to the priority date of the present application. (See Appendices C-1 and C-2 submitted to the USPTO in the Response to Office Action filed on April 9, 2002 and received on April 18, 2002) The revision history indicates that the sequence was first deposited with GenBank on September 1, 1998, with subsequent sequence revisions submitted on November 22, 1998, June 12, 2000, and September 30, 2000.

The September 1998 deposit, the earliest deposit, is a working draft of the Homo Sapiens clone DJ0584D14, and it consists of 18 arbitrarily ordered contigs with 17 gaps of unknown size therebetween. The November 1998 deposit is also a working draft of the same clone, and it consists of 3 arbitrarily ordered contigs with 2 gaps of unknown size therebetween.

Thus, the Sulston et al reference is not anticipatory prior art.

Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 1-3, and 8-9 under 35 U.S.C. §102(a) as being anticipated by Sulston et al. (Genome Research, 8(11):1097-1108).

#### **Rejection under 35 U.S.C. §103(a)**

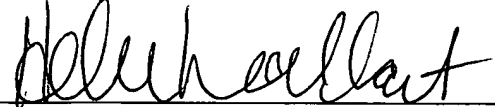
The Examiner has maintained his rejection of claims 1-6 and 8-16 under 35 U.S.C. §103(a) as being unpatentable over Sulston et al. (Genome Research, 8(11):1097-1108, 1998). Applicants respectfully traverse the rejection for the same reasons stated above under the 102(a) rejection.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of now pending claims 1-6 and 8-16 under 35 U.S.C. §103(a) as being unpatentable over Sulston et al. (Genome Research, 8(11):1097-1108, 1998).

**Summary**

Applicants believe that each of the pending claims now is in condition for allowance. If the Examiner has any questions and believes that a telephone conference with Applicants' representative would prove helpful in expediting the prosecution of this application, the Examiner is urged to call the undersigned at (617) 720-3500 (ext. 259).

Respectfully submitted,

A handwritten signature in cursive script, appearing to read 'Helen Lockhart', written over a horizontal line.

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